

Global Indicators

U.S. Financial Markets
January 2007



TABLE OF CONTENTS

Annual Financial Market Highlights.....	2
Central Bank Pauses Again	3
Yield Curve Inversion	3
Price Indices Moderate.....	5
Industrial Production Remains Strong	6
Surveys Suggest Slower Growth.....	6
Job Creation and Wage Growth Critical for Growth	8
Summary	9

Annual Financial Market Highlights I Quarter 2007

- *The Federal Open Market Committee elects to again maintain the current level of interest rates on federal funds at their mid-December monetary meeting; the futures market projects the central bank will cut interest rates ½ of one percent by the end of 2007.*
- *The yield curve retains an inverted shape as short-term rates exceed long-term; the inversion confirms expectations of declining interest rates in 2007 and raises the probability of a recession to about 35 percent.*
- *Despite the pessimistic perspective of the yield curve and expectations of declining interest rates, corporate bond credit spreads decline and equity prices soar.*
- *Prior monetary restraint accompanied by modest growth in the supply of money has suppressed inflationary expectations.*
- *The U.S. economy must continue to maintain productivity, and businesses must operate more efficiently or absorb lower gross profit margins to offset the high cost of commodities experienced in 2006.*
- *Gross domestic product is projected to increase by less than the long-term trend rate of three percent in 2007.*
- *The growth rate of debt slows markedly in the III quarter of 2006 as consumers and businesses scale back plans to purchase durable goods and invest in new property.*
- *The monthly survey of purchasing managers in the manufacturing sector turns pessimistic for the first time almost four years late in 2006 as firms report lesser new orders, production and employment.*
- *Industrial production improves and capacity utilization rates remain high by historical standards.*
- *Consumer confidence slips late in 2006 despite strong job growth, a low unemployment rate and wage gains.*
- *Holiday sales, especially electronics and appliances, remain solid but do not match 2005 experience*
- *The housing market continues to contract as the supply of homes on the market grows and home prices fall.*

Annual Financial Market Highlights I Quarter 2007

Central Bank Pauses Again

Yield Curve Inversion

The Federal Open Market Committee (FOMC) again kept interest rates unchanged at the central bank's mid-December meeting. Federal funds have now been trading at 5.25 percent for the past half-year. The *Press Release*, which follows a Federal Reserve meeting, indicated, "Although recent indicators have been mixed, the economy seems likely to expand at a moderate pace on balance over coming quarters." The FOMC now acknowledge **mixed** signals applicable to the economy. The *Beige Book* prepared several weeks prior to a meeting of the FOMC suggested, "Despite continuing softness in automobile and housing-related sales, most Districts reported that consumer spending increased during October and early November." According to a subsidiary of MasterCard,

holiday spending between Thanksgiving and Christmas increased 6.6 percent above year-earlier levels when sales had jumped 8.7 percent. Last-minute shopping and heavy discounting failed to deliver momentum expected by retailers. Ben Bernanke, Chairman of the Board of Governors of the Federal Reserve, recently focused on prices rather than slow growth when he said, "Underlying inflation is uncomfortably high." The market believes the FOMC will change focus in 2007. The futures market applicable to federal funds projects a 40 percent probability the FOMC will cut rates by ¼ of one percent by June, 2007 and fully certain that rates will decline ½ of one percent by the end of next year.

Table 1
Annual Interest Rate Spread Trends

Money Market (Three-month)	IV Quarter 2006		IV Quarter 2005	
	Rate	Spread	Rate	Spread
U.S. Treasury Bill	4.96%	0.00%	3.98%	0.00%
Commercial Paper	5.30%	0.34%	4.43%	0.45%
Certificate of Deposit	5.33%	0.37%	4.46%	0.48%
Capital Market (20 to 30 Years)				
U.S. Treasury Bond	4.81%	0.00%	4.59%	0.00%
Corporate Bond				
High-grade (Aa)	5.77%	0.96%	5.61%	1.02%
Medium-grade (Baa)	6.16%	1.29%	5.93%	1.34%
Low-grade (B)	7.67%	2.86%	8.14%	3.55%
Mortgage-backed Security				
Fannie Mae (FNMA)	5.65%	0.84%	5.69%	1.10%

Source: *The Wall Street Journal* and *Merrill Lynch Indices*

Table 1 illustrates the **annual** change in U.S. interest rates for key short-term money market, and long-term capital market instruments. Interest rates respond to shifts in the global

supply of and demand for funds, and to perceptions of expected inflation. Short-term money market interest rates increased another one percent during 2006. The trading range of

federal funds approved by the Federal Reserve increased the same one percent and moved from 4.25 to 5.25 percent. Despite the continued monetary tightening engineered by the FOMC for the first half of 2006, long-term U.S. Treasury bond yields increased by less than ¼ of one percent. The market retains confidence that the FOMC will not allow inflation to accelerate. Monetary restraint has reduced inflationary pressures. Gross domestic product (GDP) expanded at an annualized real rate of 2.0 percent in the III quarter of 2006 versus 4.2 percent one year ago. The majority of economists project GDP will grow at less than the long-term trend rate of 3.0 percent in 2007.

Table 1 also illustrates the annual shift in interest rate spreads; a spread reflects the difference in yield between a corporate or agency security and a U.S. Treasury instrument of comparable maturity. Interest rate spreads mostly change in response to perceptions of and tolerance for risk by investors and traders. Credit spreads for short-term money market instruments have decreased since 2005 as corporate working capital needs have moderated and demand for bank loans and commercial paper weakened. Capital market credit spreads decreased in 2006, especially for low-grade corporate debt, as market optimism suggests continued growth, albeit less than trend. The FOMC achieved a “soft landing” in 2006.

Table 2
Annual Interest Rate Spread Trends

Spread	IV Quarter 2006	IV Quarter 2005
Yield Curve	-0.34%	0.39%
Medium-grade Corporate	0.39%	0.33%
Low-grade Corporate	1.90%	2.53%
Inflation	2.28%	2.30%

Source: *The Wall Street Journal* and *Merrill Lynch Indices*

Several interest rate spread relationships, to include the yield curve spread, corporate bond credit spreads, and the U.S. Treasury Note/Treasury Inflation-protected Security spread provide information that may be used to project future economic conditions, and to confirm recently-released information about trends within the U.S. economy. Although individual indicators may provide false indications of strength or weakness, the composite spreads provide a reasonable representation of market expectations. Table 2 illustrates the annual trend for each of the key interest rate spreads.

- **Yield Curve Spread** – The yield curve provides a graphical relationship between the yield and the remaining term of a U.S. Treasury security. The yield curve spread is defined as the difference in yield between ten-year U.S. Treasury notes and three-

month U.S. Treasury bills. The slope of the yield curve partly reflects expectations of interest rates in the future. A negative slope suggests the market expects interest rates to decline next year as monetary concern with inflation shifts to a focus on maintaining growth. The yield curve spread has plunged from almost 200 basis points two years ago to a **negative** 34 basis points as of the beginning of 2007. The yield curve spread is much lower than the historical average, which has approximated 160 basis points over the past decade. Based on current yield curve slope and research conducted by the Federal Reserve Bank of New York, there exists a **35** percent probability of a recession occurring in 2007. A contraction will occur if housing market fundamentals continue to weaken and spill over to consumer spending and manufacturing.

- Corporate Credit Spreads** – The corporate credit spread reflects the difference in yield between corporate securities of comparable maturity but different asset quality. The low-grade corporate bond spread provides an especially good gauge of the market’s perception of and tolerance for credit risk. The yield spread between low-grade (e.g., BB, B and CCC credit ratings) and high-grade (e.g., AAA and AA ratings) corporate debt declined by 60 basis points in 2006 as the market retains confidence economic growth will continue. The low-grade spread had fallen to 125 basis points two years ago during the full expansion phase of the business cycle. The corporate bond spread decreases when traders believe the economy will continue to expand and investors reach for higher yields by investing in low-grade bonds rather than seek the safety of U.S. Treasury securities. Meanwhile, the spread between medium-grade (e.g., A and BBB ratings) and high-grade corporate bonds increased modestly from 32 basis points one year ago to 39 basis points today.
- Inflation Spread** – The popular price indices illustrate **historical** price trends. The financial markets can be interpreted to identify **future** inflation expectations by focusing on the difference between the nominal yield for 10-year U.S. Treasury notes, which were used to derive the U.S. Treasury yield curve spread, and the real rate for 10-year Treasury Inflation-protected securities. The inflation spread was basically unchanged between the beginning and end of 2006. The financial markets project average annual inflation of approximately 2.3 percent over the next decade. Inflation, as measured by the Consumer Price Index, increased by 2.0 percent over the past year. The dollar lost 10.7 percent against the euro but gained 2.2 percent against the yen in 2006. The cost of imported goods increases when the U.S. dollar loses value and exporters have more of an opportunity to increase the price of their goods given the less expensive dollar cost of exports. Import prices have

increased just 1.2 percent in the past year while export prices jumped 3.9 percent.

The FOMC recently stated, “Readings on core inflation remain elevated, and the high level of resource utilization has the potential to sustain inflation pressures.” The Federal Reserve fully recognizes some inflation risks remain in the United States. As such, the central bank has ensured the money supply does not contribute to unwanted price pressures; the narrow money supply (M1) declined by ½ of one percent in the last year while the broad money supply (M2) increased by a manageable 5.1 percent pace.

Price Indices Moderate

The financial markets believe the high cost of oil will neither derail economic growth nor precipitate inflation. The popular price indices are approaching levels preferred by selected voting members of the FOMC.

- The Producer Price Index increased 2.0% in November but is just 0.9% above year-earlier levels. Core producer prices, which remove volatile energy and food costs, jumped 1.3% in November but are likewise only 1.8% higher than 2005.
- The Consumer Price Index was unchanged in November and 2.0% higher than twelve months ago. Core consumer prices, however, remain 2.6% above year-earlier levels.
- Prices derived by the Personal Consumption Expenditure index rose .1% in November and are 1.9% higher than 2005. Core prices also increased .1% in the past month and are 2.2% above last year. The FOMC would prefer to see the later measure range between 1 and 2%.

Prices continue to increase but slower growth is restraining inflationary pressures.

Table 3
Commodity Cost Trends
(Percentage Change as of December 2006)

Commodity	Past Month	Past Year
Food	1.4%	19.3%
Industrial	3.7%	40.0%
Gold	- 0.8%	24.2%
Oil	9.3%	9.5%
All-commodity	2.6%	29.6%

Source: *The Economist*

Table 3 illustrates the monthly and annual trend in the percentage cost of key goods traded in the commodity market. Food, industrial goods and gold prices all increased at double-digit rates during the past year. Higher cost commodities need not trigger inflation if business either is able to operate more efficiently or accept with lower gross profit margins. Business must remain productive to ensure inflation does not accelerate given the much higher cost of

commodities. Labor productivity is slowing and increased just 1.4 percent since the third quarter of 2005. The *Beige Book* prepared by the Federal Reserve indicated, "Most Districts reported that prices moderated for construction materials and energy products." Although the sluggish housing market is dragging down economic growth, it is also taking pressure off inflation.

Industrial Production Remains Strong **Surveys Suggest Slower Growth**

The Index of Leading Indicators compiled by the Conference Board inched up .1 percent in November and has now increased in each of the last three months. Four of the components increased to include money growth while six factors fell to include lesser housing permits. Overall, the Index of Leading Indicators has increased by only .2 percent in the last half-year, which is consistent with growth significantly less than trend. Similarly, the monthly survey of purchasing managers in the manufacturing sector declined to 49.5 in November from 51.2 in October. A reading below "50" suggests contraction and the survey results are worrisome. The monthly survey had exceeded 50 for almost four years. Purchasing managers noted lesser production, fewer new orders along with declining jobs. Other indicators are not as pessimistic.

- Industrial production increased .2% in November and production is 3.8% above year-earlier levels. Business equipment has expanded 9.6% in the last year while construction has declined 1.9%.
- Capacity utilization at factories, mines and utilities was unchanged in November and registered a strong 81.8% utilization compared to 80.7% a year ago. Capacity has expanded by 2.4% in the last year.
- Durable goods orders increased 1.9% in November but fell 1.1% excluding volatile transportation orders.

The manufacturing sector must continue to expand to offset weakness in the housing and construction sector.

Table 4
Quarterly Growth in Debt by Sector
(Seasonally-adjusted Annual Rates)

Sector	III Quarter 2006	III Quarter 2005
Total	6.7%	9.7%
Federal Government	3.3%	5.8%
Households	6.8%	11.9%
Business	7.7%	8.2%
State Government	9.3%	12.3%

Source: *Flow of Funds Accounts* prepared by the Board of Governors of the Federal Reserve System.

The Federal Reserve Board of Governors released the most recent *Flow of Funds* that depict annual growth rates in debt by various sectors. Table 4 illustrates the percentage change in debt on an annualized basis for selected sectors in the third quarter of 2006 versus 2005. Debt continues to expand but is now growing at a lesser rate than last year for all sectors illustrated. Debt ballooned at a 9.7 percent pace a year ago versus 6.7 percent this year. The biggest change has occurred for households; consumers increased their debt load at an 11.9 percent rate in 2005 compared to 6.8 percent this year. Business reliance on debt has slowed too as executives become more cautious regarding expansion plans in 2007. Consumer and business debt typically grows more slowly when the economy expands more gradually; private debt often declines in a recession.

After languishing much of 2005, the equity

market staged a rally in 2006. Table 5 illustrates key indicators applicable to the stock market trends. The broad-based Standard & Poors 500 Index increased about 11.0 percent during the past year, which is a little lower than the 12.2 percent average annual appreciation rate posted over a 75 year period ended in 2002. The price-earnings (P-E) multiple assigned by investors for next year's earnings increased marginally from 15.2 time earnings to 15.3 times earnings. The slightly higher P-E ratio suggests equity investors remain confident about future prospects. Mergers, acquisitions and buyout activity are all pushing stock prices up. Expectations of lower interest rates reduce required returns for investors and makes stocks more attractive too. Regardless of reason, higher stock prices lead to improved wealth, enhanced business and consumer confidence, and continued spending by the one-third of Americans with an equity portfolio.

Table 5
Annual Equity Market Trends
(Standard and Poor's 500)

Standard & Poor's 500	IV Quarter 2006	IV Quarter 2005
Index	1,413.2	1,272.7
Price-earnings Ratio		
Trailing Year	17.7x	18.6x
Next Year	15.3x	15.2x
Dividend Yield	1.76%	1.79%

Source: *Business Week* and *Standard and Poor's Corporation*

Job Creation and Wage Growth ***Critical for Growth***

The U.S. economy created another 132,000 jobs in November; job growth has exceeded 150,000 positions per month in the last half-year. Job growth occurred in business, food and health services. Jobs are being lost in construction and manufacturing. The unemployment rate inched up .1 percent to a still low 4.5 percent rate. Consumer confidence, as measured by the Conference Board, declined again in November. The Consumer Confidence Index fell from 105.1 in October to 102.9 in November. The outlook for the labor market is mixed. The proportion of respondents expecting more plentiful jobs in the next six months decreased from 15.1 to 13.1 percent. The proportion projecting fewer jobs also fell from 18.0 to 16.7 percent. Jobs are critical to spending and growth.

- Personal income increased .3% in November and 3.2% over the past year. Expenditures increased .5% in November and are now 3.8% above year-earlier levels. Because spending exceeds income, the personal saving rate remains mired at a **negative** 1.0% of personal disposable income. However, spending activity is now more closely aligned with income than several years ago.
- Retailers reported mixed results for November; Wal-Mart's sales at stores open at least one year fell .1% from that posted in 2005 while sales at Federated

increased 8.5%. Upscale stores are prospering more than discount stores as rising stock prices boost the net worth of more wealthy consumers.

- Retail sales increased 1.0% in November while on-line sales increased 1.3%. Electronic equipment and appliances sold especially well in the holiday period.

Personal consumption expenditures grew at an annual rate of 2.7 percent over the past six months compared with 3.9 percent one year ago. The consumer will continue to spend as long as jobs are plentiful and wages increase.

As expected, the housing market maintains a drag on the economy.

- Housing starts fell 6.7% in November to 1.6 million annualized starts. Housing starts are down 25.5% from last year.
- Construction spending fell 1% in November and is up just .5% in the last year. Residential construction spending has declined 9.4% since 2005. Non-residential and public construction spending is sharply up.
- Sales of new homes declined 3.2% in October to 1.0 million annualized unit sales. New home sales have declined 25.4% in the past year as the market

grapples with a 7.0 month supply of new homes available for purchase.

- Sales of existing homes increased .5% in October to 6.2 million annualized unit sales. The median price of a home sold is 3.5% lower than a year ago.

The proportion of mortgagors paying loans slow has increased in the past year. If foreclosure activity increases sharply in 2007, the supply of additional properties on the market will further depress home prices. The housing market supported very quick growth between 2003 and 2005; the over-saturated home market is now curbing growth.

Summary

The financial markets offer conflicting opinions regarding the direction of the U.S. economy in 2007. The inverted yield curve suggests a 35 percent probability of a recession next year. Short-term interest rates are not high; long-term rates are low. Despite the relatively high probability of a recession in 2007, corporate bonds spreads are low and have declined in the past year. Stock prices are increasing given investor confidence in corporate earnings, economic growth, unabated merger & acquisition activity, and lower interest rates. The futures market expects the FOMC to cut interest rates by ½ of one percent by the end of 2007 as the central bank will then tilt to supporting growth versus current concern with suppressing price pressures.

The U.S. economy continues to create jobs and the unemployment rate remains low at 4.5 percent. Wage growth is now more closely

aligned with spending than several years ago when mortgagors were supporting purchases with home equity loans and refinancing activity. Despite the job growth, consumer confidence is declining. Home sales and housing starts have plummeted about 25 percent in the past twelve months. The supply of new and existing homes exceeds seven months, and new home prices are off 3.5 percent in the last year. The most recent survey of purchasing managers in the manufacturing sector turned pessimistic for the first time in almost four years. Yet, industrial production is up and capacity utilization rates remain high. The mixed economic signals and diverse statistical indices are common to a period of transition. Consumer spending and job growth are critical if the economy is going to expand for the sixth year of the current business cycle. The housing market must stabilize and the manufacturing sector must not contract. Focus on job growth, consumer spending and industrial production.

This as well as previous reports are available online at
<http://www.gwu.edu/~business/news/indicators.htm>

The GW School of Business publishes Global Indicators: U.S. Financial Markets
as a service for students, alumni and friends of the University.

The publication is prepared by William C. Handorf, professor of finance.